## Sampling Results for the Conditional Waiver for Irrigated Agriculture Monitoring Program – Central Valley Regional Water Quality Control Board

Quarterly Report – Activities from October 1, 2005 – December 31, 2005

Prepared for the Central Valley Regional Water Quality Control Board

By

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No sampling was conducted between October 1, 2005 and December 31, 2005. Activities during the sixth quarter included database development and management, preparation for dormant season sampling, and reporting. During this period of time, five employees, Melissa Turner, Anja Wehrmann, Genevieve Walden, Ling Chu and PI Johnson were working under the contract of the Agricultural Waiver program.

## **Database development and management**

Development of the database began in the first irrigation season, 2004, for sampling performed by the Aquatic Ecosystems Analysis Laboratory (AEAL). As specified in the contract, data was entered in a SWAMP compatible database and Melissa Turner has been the database manager. Since that time the database has grown extensively as well as the management duties. To help assist Melissa in managing the database, Genevieve Walden was hired and trained to use the SWAMP comparable database. Melissa trained Genevieve to configure data into the SWAMP format, run macros on the chemistry data, upload toxicity data, QA data, and update SWAMP codes. Melissa has actively participated in database user groups with Moss Landing Database Management team, San Francisco Estuary Institute and the Regional Water Quality Control Board to continue to update and resolve issues with various groups using the same database format. Throughout the sixth quarter, data from previous sampling events were thoroughly reviewed for quality assurance purposes using UCD-AEAL protocols for SWAMP comparability. This data was then entered into the database, including all of the pesticide data, toxicity data from AquaScience, Inc. and total organic carbon data from Dr. Peter Green (UC Davis). One on one work was done with Don Weston (UC Berkeley) and Michael Lydy (Southern Illinois University) to get the sediment toxicity and chemistry data into the proper SWAMP format. By the end of December all data from previous sampling (except sediment) were uploaded into the database and the database was placed on the RWQCB ftp site for Melissa Morris (CVRWQCB staff) to review. Sediment data has been put in to the SWAMP format and is awaiting review by Don Weston. We expect to receive this data back from Don Weston and have it entered into the database by the end of February, 2006. To aid Melissa Morris in providing results to various parties, Excel<sup>®</sup> spreadsheets were also posted onto the ftp site for all results received during the 2004 and 2005 sampling events. UC Davis created and entered project ID's, lab/site codes, seasonal codes, and updated the methods, equipment and site descriptions, as well as Ag Waiver specific SWAMP based OA checklists. In addition, new forms were designed for the dormant season sampling. Tutorials on filling out the field sheets properly and entering in the data into the database were provided for all seasonal employees hired for the dormant season sampling. Documents to help with filling in the field sheets properly in the field were updated.

## Preparation for dormant season sampling

Position descriptions were prepared and filed with the University in preparation for advertising and interviewing candidates. Positions were advertised and the interview process for the Junior Specialist positions started in the latter half of October 2005. Two people were hired and started working on the 19<sup>th</sup> of December 2005. During the last week of December the new employees participated in a University of California Driver Safety class and a variety of field training sessions. Teams were established for sampling

and all teams were provided with copies of Standard Operating Procedures for field sampling procedures and other materials to read and reference during sampling.

All supplies were inventoried and prepared for sampling. L. Chu, A. Wehrmann and PI Johnson collaborated with Regional Board staff to develop the list of sites and monitoring constituents for the dormant season sampling.

## Reporting

The fifth quarterly report was prepared during the sixth quarter. L. Chu, A. Wehrmann and PI Johnson were responsible for producing the report. L. Chu and A. Wehrmann compiled the data and necessary information for the first quarterly report and wrote the outline for the report.